COORDINATE CONDUIT ROUTING WITH ALL OTHER TRADES. 2. ALL EXPOSED CONDUIT SHALL BE RUN PARALLEL TO BUILDING WALLS AND BEAMS EXCEPT WHERE OTHERWISE SHOWN. CONTRACTOR SHALL

INSTALL CONDUIT IN SUCH A MANNER TO AVOID ALL INTERFERENCES.

- 3. DEFLECTION/EXPANSION FITTINGS SHALL BE PROVIDED WHERE RIGID METAL CONDUIT CROSSES STRUCTURAL EXPANSION JOINTS.
- 4. EXPOSED CONDUIT SHALL BE SUPPORTED ON WALLS OR CEILINGS BY APPROVED HANGERS OF ANGLE OR CHANNEL CONSTRUCTION. CONDUITS SHALL BE SUPPORTED AT LEAST EVERY EIGHT (8) FEET.
- 5. ALL SPARE CONDUITS SHALL BE TERMINATED AS SHOWN ON CONDUIT LAYOUTS AND SHALL BE CAPPED 3" ABOVE FINISHED FLOOR.
- 6. NO CONDUIT SHALL BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.
- THE NUMBER OF WIRES SHOWN ON THE DRAWINGS IS NOT NECESSARILY THE CORRECT NUMBER REQUIRED. THE CONTRACTOR SHALL INSTALL AS MANY AS ARE NECESSARY FOR PROVIDING A COMPLETE ELECTRICAL SYSTEM IN EACH CASE.
- 8. EQUIPMENT FURNISHED BY OTHERS SHALL BE INSTALLED & ENERGIZED BY THE ELECTRICAL CONTRACTOR.
- 9. THE ELECTRICAL CONTRACTOR SHALL NOT ENDANGER THE STABILITY OF THE STRUCTURE OR ANY PART THEREOF BY CUTTING, DRILLING OR OTHERWISE, AND SHALL NOT IN ANY WAY CUT OR ALTER THE WORK OF ANY OTHER CONTRACTOR, EXCEPT WITH THE WRITTEN CONSENT OF AND UNDER THE DIRECTION OF THE ENGINEER AND/OR GENERAL CONTRACTOR
- 10. THE ELECTRICAL CONTRACTOR SHALL SECURE ALL APPROVALS AND CERTIFICATES AND PAY ALL FEES FOR ALL THE WORK INSTALLED. CERTIFICATES SHALL BE DELIVERED TO THE GENERAL CONTRACTOR BEFORE FINAL PAYMENT WILL BE MADE.
- 11. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST APPLICABLE VERSION OF THE NEC AS WELL AS ALL STATE AND LOCAL
- 12. THE DRAWINGS INDICATE AND THE SPECIFICATIONS DESCRIBE THE GENERAL ARRANGEMENTS AND LOCATION OF OUTLET BOXES, ETC. THE CONTRACTOR SHALL, WITHOUT EXTRA COST TO THE OWNER, MAKE ALL REASONABLE MODIFICATIONS IN THE WORK AS MAY BE REQUIRED TO PREVENT CONFLICT WITH EXISTING CONDITIONS, THE WORK OF OTHER TRADES AND FOR THE PROPER INSTALLATION OF THE WORK.
- 13. PRIOR TO SUBMISSION OF BID PROPOSAL, THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE CAREFULLY THE EXISTING CONDITIONS AND THE DIFFICULTIES THAT WILL BE INCURRED DURING THE PERFORMANCE OF HIS WORK.
 - A. VERIFY & COORDINATE CONDUIT ROUTING.
 - B. VERIFY & COORDINATE SCOPE OF DEMOLITION WORK.
- C. VERIFY & COORDINATE SCOPE OF WORK INVOLVING CONNECTIONS TO EXISTING BASE BUILDING SYSTEMS.
- D. VERIFY SCOPE OF WORK THAT HAS TO BE DONE WITH EXISTING FIRE ALARM SYSTEM AS REQUIRED TO ACCOMMODATE ALL ADDED
- E. VERIFY WITH GENERAL CONTRACTOR SCOPE OF WORK ASSOCIATED WITH RIGGING OF EQUIPMENT TO BE PREPURCHASED.
- COORDINATE WITH THE BUILDING ENGINEER AND GENERAL CONTRACTOR SHUT DOWNS OF EXISTING FACILITIES.
- 14. ARRANGE FOR SITE VISIT WITH THE BLDG. OWNER REPRESENTATIVE AND GENERAL CONTRACTOR.
- 15. CLAIMS FOR ADDITIONAL COMPENSATION ARISING DUE TO THE FAILURE OF THE CONTRACTOR TO FULLY UNDERSTAND THE SITE CONDITIONS SHALL NOT BE PAID FOR BY ANY OTHER PARTY.
- 16. CONNECTIONS TO EXISTING WORK:
- INSTALL NEW WORK AND CONNECT TO EXISTING WORK WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES.
- B. TEMPORARY SHUTDOWNS OF EXISTING SERVICES:
 - a. AT NO ADDITIONAL CHARGES.
 - b. AT TIMES NOT TO INTERFERE WITH NORMAL OPERATION OF EXISTING SERVICES.
 - c. ONLY WITH WRITTEN CONSENT OF THE GENERAL CONTRACTOR AND/OR BUILDING OWNERS REPRESENTATIVE.
- C. ALARM AND EMERGENCY SYSTEMS: ALARMS NEED TO BE TAKEN OFFLINE ON A DAILY BASIS WHILE WORK IS COMPLETED. CONTRACTOR SHALL CONTACT SECURITY WHEN AN ALARM IS TO BE TURNED OFF AND AT THE END OF THE DAY WHEN WORK IS
- D. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES AS REQUIRED WITH NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING WORK.
- E. CONNECT NEW WORK TO EXISTING WORK IN NEAT AND ACCEPTABLE MANNER. RESTORE EXISTING DISTURBED WORK TO ORIGINAL CONDITION, INCLUDING MAINTENANCE OF WIRING CONTINUITY AS REQUIRED.
- F. PRIOR TO DEMOLITION OF AN EXISTING POWER PANEL, THE CONTRACTOR SHALL SEARCH OUT ALL EXISTING CIRCUITS FED FROM THE PANEL TO PREVENT ANY ACCIDENTAL SERVICE INTERRUPTIONS
- 17. LEAVE WIRE SUFFICIENTLY LONG TO PERMIT MAKING FINAL CONNECTIONS. CONDUIT OVER 10 FEET IN WHICH WIRING IS NOT INSTALLED-FURNISH
- 18. DO NOT PULL THERMOPLASTIC WIRES AT TEMPERATURES LOWER THAN 32 DEG F (O DEG C). PROVIDE CABLE SUPPORTS FOR WIRE IN RISER CONDUITS AS REQUIRED BY CODE.
- 19. JUNCTION & PULL BOXES: DO NOT LOCATE EXPOSED IN FINISH SPACES UNLESS REQUIRED BY NEC. WHERE NECESSARY, REROUTE CONDUIT OR MAKE OTHER ARRANGEMENTS FOR CONCEALMENT. PROVIDE PULL BOXES AS INDICATED AND WHEREVER NECESSARY TO FACILITATE PULLING OF WIRE AND COORDINATE LOCATIONS WITH OTHER TRADES. COVERS OF JUNCTION AND PULL BOXES SHALL BE ACCESSIBLE, FOR EMPTY CONDUITS, INSTALL PULL BOXES EVERY 100 FEET AND AS INDICATED. COORDINATE LOCATIONS WITH OTHER TRADES.
- 20. SUPPORT PANEL, JUNCTION & PULL BOXES INDEPENDENTLY TO BUILDING STRUCTURE WITH NO WEIGHT BEARING ON CONDUIT.
- 21. ALL ACCESS DOOR LOCATIONS SHALL BE REVIEWED BY ENGINEER PRIOR TO INSTALLATION.

SWITCHBOARDS, PANEL BOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES, AND MOTOR CONTROL CENTERS THAT ARE LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT SERVICING OR MAINTENANCE WHILE ENERGIZED SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.

- 22. FOR EACH LOCATION OF OTHER TRADES EQUIPMENT, SEE RESPECTIVE
- 23. CONTRACTOR SHALL PROVIDE AND INSTALL ALL COMPONENTS INDICATED ON DETAILS SHEETS, PLANS, SPECIFICATIONS AND ALL PERTINENT EQUIPMENT REQUIRED FOR A COMPLETE WORKABLE SYSTEM.
- 24. USE OF ISOLATED TYPE GROUNDING CONDUCTOR FOR IG TYPE RECEPTACLES, PLUG MOLDS & EQUIPMENT DOES NOT RELIEVE REQUIREMENT FOR GROUNDING CONDUIT SYSTEM, DEVICES AND EQUIPMENT AS REQUIRED BY ALL APPLICABLE CODES. PROVIDE AND INSTALL GROUNDING FITTING, EQUIPMENT GROUND WIRING ETC. AS REQUIRED.
- 25. ALL CONDUITS, TRANSFORMERS ETC. SHALL BE SUPPORTED FROM STRUCTURAL STEEL ONLY. COORDINATE WITH GENERAL CONTRACTOR.
- 26. ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT IN ELECTRICAL AND SERVICE SWITCHBOARD ROOM SHALL BE INSTALLED ON 4" CONCRETE PAD AS REQUIRED TO SUPPORT EACH SECTION OF EQUIPMENT. COORDINATE WITH GENERAL CONTRACTOR.
- 27. PROVIDE BARRIERS IN ALL PULL BOXES FOR CONDUIT SETS.
- 28. PAINT AND RUST PROOF ALL HARDWARE & CONDUITS ON ROOF AND IN EXPOSED AREAS AS DIRECTED BY GENERAL CONTRACTOR.
- 29. NUMBER SHOWN ADJACENT TO LIGHTING FIXTURES, RECEPTACLES, OUTLETS, JUNCTION BOXES ETC. INDICATES CIRCUIT NUMBER.
- 30. ALL GROUND CONNECTIONS TO THE BUILDING STEEL SHALL BE EXOTHERMIC WELDED.
- 31. FLEXIBLE CONNECTIONS IN EXPOSED AREAS SHALL NOT EXCEED 18" MAXIMUM.
- 32. ALL EQUIPMENT DEVICES, WIRING, ETC. SHOWN ON THE DRAWINGS IS NEW UNLESS OTHERWISE NOTED.
- 33. ELECTRICAL CONTRACTOR SHALL PROVIDE SLEEVES/ OPENINGS FOR ALL CONDUIT RISERS PENETRATING WALLS, ROOF & FLOOR SLABS. ALL ROOF AND MECH. ROOMS SLAB PENETRATIONS SHALL BE WATERPROOF. METHOD OF PENETRATIONS & FIRE/WATER WATER PROOFING SHALL BE APPROVED BY ENGINEER, COORDINATE WITH GENERAL CONTRACTOR.
- 34. ELECTRICAL CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH OWNERS BUILDING STANDARDS FOR CONSTRUCTION.
- 35. ALL FINAL CONNECTIONS TO VIBRATING EQUIPMENT (MOTORS, GENERATORS ETC.) SHALL BE THROUGH A LIQUID TIGHT FLEXIBLE METAL
- 36. ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE SEALED FIRE AND SMOKE TIGHT WITH AN APPROPRIATE U.L. LISTED FIRESTOPPING MATERIAL AND OR SYSTEM.
- 37. THE TERMS "PROVIDE" OR "FURNISH", AS USED ON THESE PLANS, INDICATE THAT THE CONTRACTOR IS TO FURNISH AND INSTALL THE REFERENCED EQUIPMENT OR SYSTEMS IN THEIR ENTIRETY AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.
- 38. CONTRACT CLOSE OUT: IN THE PRESENCE OF THE OWNER, ENGINEER AND HVAC STAFF: DEMONSTRATING OPERATION OF SYSTEMS AND THAT ALL SPECIFICATIONS HAVE BEEN MET TO THE SATISFACTION OF ALL
- 39. IT IS THE INTENTION THAT THESE SPECIFICATIONS, AND DRAWINGS ACCOMPANYING SAME, SHALL PROVIDE FOR THE FURNISHING AND INSTALLING OF THE NEW SHEPARD CENTER CHILLER (CH-1). COMPLETE AS SPECIFIED AND SHOWN. ANY WORK SHOWN ON THE DRAWINGS AND NOT PARTICULARLY DESCRIBED IN THE SPECIFICATIONS OR VICE VERSA, OR ANY WORK CHANGES WHICH MAY BE EVIDENTLY NECESSARY TO COMPLETE THE INSTALLATION SHALL BE FURNISHED BY THIS
- 40. IT IS THE INTENT AND PURPOSE OF THESE SPECIFICATIONS AND DRAWINGS TO INCLUDE AND PROVIDE FOR ALL MATERIALS. APPLIANCES AND LABOR TO PROPERLY COMPLETE AND LEAVE IN PERFECT WORKING CONDITION THE ENTIRE SYSTEM HEREINAFTER SPECIFIED. ANY MATERIAL. LABOR OR APPLIANCE NOT SPECIFICALLY MENTIONED IN THESE SPECIFICATIONS OR SHOWN ON THE DRAWINGS, BUT NECESSARY FOR A COMPLETE INSTALLATION MUST BE FURNISHED BY THIS CONTRACTOR.
- 41. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE ALTERATIONS AND/OR NEW CONSTRUCTION AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS TO PROVIDE COMPLETE NEW SYSTEMS IN EVERY RESPECT, CAPABLE OF OPERATING AS DESIGNED. IT IS NOT INTENDED THAT EVERY FITTING, MINOR DETAIL OR FEATURE BE SHOWN ON DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DETAIL NECESSARY FOR COMPLETION OF THESE SYSTEMS IN ACCORDANCE WITH GOOD PRACTICE.

GENERAL NOTES:

SYSTEM.

- 1. THE DRAWINGS ON THESE PLANS ARE DIAGRAMMATIC. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL HVAC WORK WITH OTHER TRADES AND THE BUILDING STRUCTURE. NO EXTRA PAYMENTS WILL BE AUTHORIZED FOR REROUTING OR REMOVAL OF INSTALLED WORK DUE TO LACK OF COORDINATION WITH OTHER SYSTEMS.
- 2. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF HIS WORK.
- 3. ACCESS PANELS SHALL BE PROVIDED IN CEILINGS, WALLS, FLOORS, ETC., AS REQUIRED TO MAINTAIN ACCESSIBILITY TO VALVES, DAMPERS, TRAPS, COILS, ETC.
- 4. ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE SEALED FIRE AND SMOKE TIGHT WITH AN APPROPRIATE U.L. LISTED FIRESTOPPING MATERIAL AND OR SYSTEM.
- 5. ALL CHILLED WATER SUPPLY & RETURN PIPING SHALL BE INSULATED PER ENERGY CONSERVATION CONSTRUCTION CODE.
- 6. PROVIDE SHUT-OFF VALVES AT ALL PIPING BRANCH TAKE-OFFS AND AT ALL CONNECTIONS TO EQUIPMENT.
- 7. PROVIDE DRAINS WITH HOSE ADAPTERS AND CAPS ON PIPING AT ALL LOW POINTS. PROVIDE MANUAL VENTS ON PIPING AT ALL HIGH POINTS.
- 8. COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL CONTRACTOR.
- 9. ALL MOTOR STARTERS SHALL BE FURNISHED BY THE HVAC CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- 10. ALL REQUIRED CONTROL EQUIPMENT AND WIRING SHALL BE FURNISHED & INSTALLED BY THE HVAC CONTRACTOR.
- 11. THE TERMS "PROVIDE" OR "FURNISH", AS USED ON THESE PLANS, INDICATE THAT THE CONTRACTOR IS TO FURNISH AND INSTALL THE REFERENCED EQUIPMENT OR SYSTEMS IN THEIR ENTIRETY AS REQUIRED FOR A COMPLETE AND OPERABLE
- 12. CONTRACTOR SHALL PROVIDE AND INSTALL ALL COMPONENTS INDICATED ON DETAIL SHEETS, PLANS, SPECIFICATIONS AND ALL PERTINENT EQUIPMENT REQUIRED FOR A COMPLETE AND WORKABLE SYSTEM.
- 13. CONTRACT CLOSE OUT: IN THE PRESENCE OF THE OWNER. ENGINEER; DEMONSTRATING OPERATION OF SYSTEMS AND THAT ALL SPECIFICATIONS HAVE BEEN MET TO THE SATISFACTION OF ALL PARTIES.

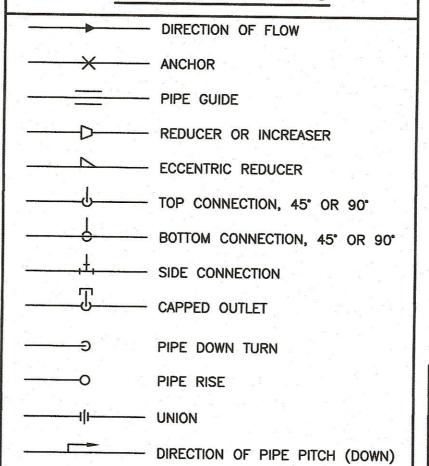
ELECTRICAL DEMOLITION NOTES:

- 1. COORDINATE WITH DEMOLITION PLANS FOR EXACT AREAS TO BE DEMOLISHED.
- 2. DISCONNECT AND REMOVE ALL DEVICES. FIXTURES, DATA/TEL. OUTLETS. POWER CONNECTIONS TO HVAC EQUIPMENT AND DISCONNECT SWITCHES, CONDUIT & WIRING FROM ALL WALLS/CEILINGS BEING REMOVED, WITHIN THIS AREA BACK TO POWER PANEL OF ORIGIN.
- 3. ALL EXISTING DEVICES SCHEDULED TO REMAIN SHALL BE EXTENDED/RE-CIRCUITED AS REQUIRED TO MAINTAIN CONTINUITY OF CIRCUIT/DEVICES.
- 4. REMOVALS SHALL INCLUDE, BUT NOT BE LIMITED TO DEVICES, FIXTURES, FIRE ALARM DEVICES, DATA/TEL. OUTLETS, POWER CONNECTIONS TO HVAC EQUIPMENT AND DISCONNECT SWITCHES, CONDUIT & WIRING.
- 5. ELECTRICAL CONTRACTOR TO PROVIDE ALL NECESSARY TEMPORARY WORK AND/OR MATERIALS TO RENDER EXISTING SYSTEM OPERATIONAL DURING ALL PHASES OF CONSTRUCTION IN ALL OCCUPIED SPACES. INCLUDING BUT NOT LIMITED TO, POWER, DATA, LIGHTING, EMERGENCY COMPONENTS & ALARMS. COORDINATE WITH ALL TRADES, OWNER AND OVERALL CONSTRUCTION PHASING SCHEDULE.
- 6. ALL CUTTING AND PATCHING NECESSARY FOR THE DEMOLITION WORK SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
- 7. IT SHALL BE THE OWNER'S RESPONSIBILITY TO REMOVE ANY LOOSE EQUIPMENT. FURNITURE, SUPPLIES, ETC. THAT MAY BE LOCATED IN THE AREA OF WORK.
- 8. THE PLANS ARE INTENDED TO CONVEY THE EXTENT AND SCOPE OF THE DEMOLITION WORK. EVERY ITEM INTENDED FOR REMOVAL MAY NOT BE SHOWN. THE CONTRACTOR IS ADVISED TO SURVEY THE PROJECT SITE BEFORE SUBMITTING A BID FOR DEMOLITION WORK.

HVAC DEMOLITION NOTES:

- 1. COORDINATE WITH DEMOLITION PLANS FOR EXACT AREAS TO BE DEMOLISHED.
- REMOVE ALL EQUIPMENT, DUCTWORK AND PIPING AS INDICATED ON PLAN. REMOVALS SHALL INCLUDE ALL SUPPORTS AND HANGERS, HOUSEKEEPING PADS, DAMPERS, VALVES, FITTINGS, CONTROLS AND ASSOCIATED LOW VOLTAGE WIRING, AND ANY OTHER ASSOCIATED ACCESSORIES WHICH PERTAIN TO THE EQUIPMENT TO BE REMOVED.
- 3. REMOVAL OF ALL POWER CONNECTIONS TO DEMOLITION ITEMS SHALL BE BY THE E.C.
- 4. ANY DISCREPANCIES BETWEEN THE DEMOLITION PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. ANY DEMOLITION WORK WHICH MAY BE QUESTIONABLE DUE TO UNFORESEEN FIELD CONDITIONS SHALL NOT BE REMOVED UNTIL REVIEWED BY THE ENGINEER OR BUILDING FACILITIES MANAGER.
- 5. DEMOLITION WORK SHALL INCLUDE THE PREPARATION OF EXISTING EQUIPMENT FOR CONNECTION TO NEW EQUIPMENT. COORDINATE DEMOLITION WORK WITH THE CONSTRUCTION PLANS.
- 6. ALL EQUIPMENT REMOVALS SHALL BECOME THE PROPERTY OF THIS CONTRACTOR. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF DEMOLITION ITEMS OFF-SITE, UNLESS OTHERWISE NOTED.
- 7. ALL CUTTING AND PATCHING NECESSARY FOR THE DEMOLITION WORK SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
- 8. IT SHALL BE THE OWNER'S RESPONSIBILITY TO REMOVE ANY LOOSE EQUIPMENT. FURNITURE, SUPPLIES, ETC. THAT MAY BE LOCATED IN THE AREA OF WORK.
- 9. THE PLANS ARE INTENDED TO CONVEY THE EXTENT AND SCOPE OF THE DEMOLITION WORK. EVERY ITEM INTENDED FOR REMOVAL MAY NOT BE SHOWN. THE CONTRACTOR IS ADVISED TO SURVEY THE PROJECT SITE BEFORE SUBMITTING A BID FOR DEMOLITION WORK.

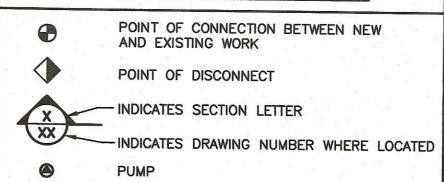
PIPING SYMBOLS



VALVE SYMBOLS GATE VALVE - THREADED/FLANGED GLOBE VALVE - THREADED/FLANGED --STRAINER FLEXIBLE CONNECTION BUTTERFLY VALVE BALL VALVE WATER FLOW MEASURING DEVICE TWO POSITION CONTROL VALVE THREE-WAY BY-PASS CONTROL VALVE

LINE TYPES -/-/- or ----- EXISTING TO BE REMOVED EXISTING TO REMAIN - NEW EQUIPMENT -CHVR------ CHILLED WATER RETURN CHILLED WATER SUPPLY -CVR------- CONDENSER WATER RETURN CONDENSER WATER SUPPLY NATURAL GAS LINE HOT WATER RETURN HOT WATER SUPPLY

GENERAL SYMBOLS



POWER SYMBOLS

- 3P, FUSED DISCONNECT SWITCH, FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. SHALL HAVE THE SAME # OF POLES & AMPERE RATING AS CONNECTING CIRCUIT UNLESS
- DOUBLE HOME RUN TRIPLE HOME RUN

ABBREVIATIONS

		MAX.	MAXIMUM
ACT	ACOUSTIC CEILING TILE	MBH	ONE THOUSAND BTUH
AD	ACCESS DOOR	M.C.	MECHANICAL CONTRACTOR
AFF	ABOVE FINISHED FLOOR	MCB	MAIN CIRCUIT BREAKER
AHU	AIR HANDLING UNIT	MCM	THOUSAND CIRCULAR MILS
AL	ALUMINUM	MD	MOTORIZED DAMPER
AP	ACCESS PANEL	MDP	MAIN DISTRIBUTION PANEL
AUTO	AUTOMATIC	MECH	MECHANICAL
AWG	AMERICAN WIRE GAUGE	MER	
BCW	BARE COPPER WIRE	MIN.	MECHANICAL EQUIPMENT ROOM
BTUH	BRITISH THERMAL UNITS/HOUR	MTD	MINIMUM
C	CONDUIT		MOUNTED
CHWR	CHILLED WATER RETURN	MTG	MOUNTING
CHWS	CHILLED WATER SUPPLY	NEC	NATIONAL ELECTRIC CODE
CKT	CIRCUIT	NTS	NOT TO SCALE
CLG		NOM.	NOMINAL
CWS	CEILING	N/C	NOT IN CONTRACT
	CONDENSER WATER SUPPLY	NIC	NOT IN CONTRACT
CU	COPPER	NM	NON-METALLIC CONDUIT
D	DRAIN	P	POLE
Db	DRY BULB TEMPERATURE, °F	Р	PUMP
dB	DECIBELS	PB	PULL BOX
DN	DOWN	ø	PHASE
DP	DISTRIBUTION PANEL	P.C.	PLUMBING CONTRACTOR
Dp	DEW POINT TEMPERATURE, *F	PD	PRESSURE DROP (FEET OF WATER
DS	DISCONNECT (LOCKOUT) SWITCH	PWR	POWER
DWG	DRAWING	PRV	PRESSURE REDUCING VALVE
EA	EACH	PSI	POUNDS PER SQUARE IN.
E.C.	ELECTRICAL CONTRACTOR	REQ.	REQUIRED
ELEC.	ELECTRICAL	RGS	RIGID GALVANIZED STEEL
EQUIP.	EQUIPMENT	RPZ	REDUCED PRESSURE ZONE
EMT	ELECTRICAL METALLIC TUBING	RM	ROOM
ET	EXPANSION TANK	SCHED.	SCHEDULE
EXIST	EXISTING	SECT.	
FC	FLEXIBLE CONNECTION	Sp. Gr.	SECTION SPECIFIC CRANTER
FL, FLR	FLOOR	SPEC.	SPECIFIC GRAVITY
FLEX	FLEXIBLE	S.S.	SPECIFICATION
PC	FIRE PROTECTION CONTRACTOR		STAINLESS STEEL
T	FEET OR FOOT	SW	SWITCH
}	NATURAL GAS PIPE	SWBD	SWITCH BOARD
GND	GROUND	SYS	SYSTEM
GFI		TYP	TYPICAL
3.C.	GROUND FAULT INTERRUPTER	U.N.O.	UNLESS NOTED OTHERWISE
	GENERAL CONTRACTOR	V	VALVE
SPM .	GALLONS PER MINUTE	VFC	VARIABLE FREQUENCY CONTROLLER
I.C.	HVAC CONTRACTOR	VIF	VERIFY IN FIELD
HP	HORSEPOWER	VI	VIBRATION ISOLATOR
-IWR	HOT WATER RETURN	VSD	VARIABLE SPEED DRIVE
lws	HOT WATER SUPPLY	W	WATT
HZ	HERTZ	Wb	WET BULB TEMPERATURE, °F
MC	INTERMEDIATE METAL CONDUIT	WFM	WATER FLOW MEASURING DEVICE
JB	JUNCTION BOX	wP a	WEATHER PROOF
(V	KILO VOLT	XFMR/	TRANSFORMER
(VA	KILO VOLT AMP	TRANSF.	
W	KILO WATT		
_F	LINEAR FEET		
BS/HR	POUNDS PER HOUR		

SPECIAL PURPOSE CONNECTION.

OTHERWISE NOTED.

CONDUIT HOME RUN TO DESIGNATED PANEL. REFER TO PANEL SCHEDULE FOR CONDUIT & CABLE QUANTITY AND

> 9/2/21 BID REV# DATE REMARKS: ISSUE # DATE ISSUED FOR: 18" 14" 12" O

> > REFERENCE SCALE UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

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OCCC SHEPARD STUDENT CENTER CHILLER REPLACEMENT

115 SOUTH STREET, MIDDLETOWN, NY 10940 SYMBOLES, NOTES & ABBREVIATIONS

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